



## LIGHT EMITTING DIODE MOTORCYCLE

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### Product Description

A **Light Emitting Diode Motorcycle (LEDiM)** is developed to replace the motorcycle normal bulb lighting system. The main idea is to develop a motorcycle lighting system using Light Emitting Diode (LED).

A simple analysis on the performance of both LED and Bulb lighting system has been performed. Results showed that **LEDiM** offers several advantages such as equivalent brightness, low power consumption, longer lifetime, as well as less maintenance comparable to the existing motorcycle bulb lighting system.

### Problem & Causes

The normal bulb motorcycle lighting system has high power consumption, shorter lifetime, and required regular maintenance. A new efficient system is needed to replace this system. Hence, Light Emitting Diode is one of the solutions.

### Originality & Novelty

- No research has been done for motorcycle LED headlamp.
- No product has been developed for motorcycle LED headlamp.

### Eco- Friendly Aspect

LED consumes less power, thus it brings less harm to the environment.

- able to reduce energy-used
- able to reduce heat generated

Eventually, LED helps to reduce global warming.

### Application & Market Potential

This system is suitable for any application that requires focus light, low power, and sustainable technology:

- transportation
- domestic lighting
- medical equipment
- measurement tools

**90%** Low Power Consumption  
**100%** Return of Investment

### PROTOTYPE

Type of Lighting System	Number of Day Tested		
	1st	2nd	3rd
LED	OK	OK	OK
Bulb	OK	OK	Headlamp Burn

